

AMENDMENTS TO THE CLAIMS

Claims 1-2 (Canceled) Please cancel claims 1-2 without prejudice to the possibility of filing one or more continuing applications directed to the subject matter recited therein.

Claims 3-7 (Canceled)

Claims 8-13 (Canceled) Please cancel claims 8-13 without prejudice to the possibility of filing one or more continuing applications directed to the subject matter recited therein.

14. (Currently Amended) A device for use in a surgical procedure in which an incision is made between two juxtaposed ribs of a patient, the device comprising:

a first arm member having a proximal end portion and a distal end portion, the distal end portion having a rib engaging blade, ~~and the distal and proximal end portions being hingedly attached to each other;~~

a second arm member having a proximal end portion and a distal end portion, the distal end portion having a rib engaging blade ~~and the distal and proximal end portions being hingedly attached to each other;~~

a mechanism that operably connects the first and the second arm members ~~at the proximal end in such a manner that the arm members are movable toward and away from each other, and that operation of the mechanism to move said arm members away from each other, when said rib engaging blades are each respectively engaged with a rib on opposite sides of the incision, also moves one of said rib engaging blades in an upward direction with respect to the other of the rib engaging blades. ; and~~

~~a rib offsetting device, the device being operably coupled to the blade of the second arm member, and adapted to move the blade portion of the second arm member in an upward direction thereby lifting the blade of the second arm member which results in lifting a section of the patient's ribs.~~

15. (Original) The device of claim 14 wherein the mechanism includes a rack bar fixedly attached to the first arm member at one end and at another end movably engages the proximal end portion of the second arm member such that the second arm member moves away and toward the first arm member along the rack bar.

Claims 16 - 17 (Canceled) Please cancel claims 16 – 17 without prejudice to the possibility of filing one or more continuing applications directed to the subject matter recited therein.

18. (Original) The device of claim 14 wherein the distal end portion of the first arm member further includes a plurality of fingers extending away from the blade for retaining fatty tissue away from the incision.

19. (New) The device of claim 14 wherein the arm member further having the rib engaging blade attached thereto that is moved in an upward direction is rotatably mounted with respect to the mechanism.

20. (New) A device for use in a surgical procedure for spreading an incision, said device comprising:

a base portion,

a first arm member fixedly attached to said base portion and having a distal end portion extending away from said base portion, said distal end portion having a first rib engaging blade;

a second arm member movably mounted with respect to said base portion, said second arm member having a second rib engaging blade; and

a mechanism operable to drive said second arm member away from said first arm member and to drive said second rib engaging blade vertically with respect to said first rib engaging blade when said first and second rib engaging blades are engaged with ribs on opposite sides of the incision.

21. (New) The device of claim 20, further comprising a support arm rotatably mounted with respect to said base portion, said support arm adapted to rest against the surface of a body of a patient during driving by said mechanism.

22. (New) The device of claim 21, wherein said support arm is fixed with respect to said second arm in one direction of rotation and rotates with said second arm with respect to said base portion during driving by said mechanism.

23. (New) The device of claim 21, wherein said support arm ratchets with respect to said second arm.

24. (New) The device of claim 21, wherein said support arm comprises a sternal pad at a distal end thereof.

25. (New) A retractor for opening the chest during surgery, said retractor comprising:
first and second substantially opposed retractor blades adapted to engage opposite incision edges of a chest incision;

first and second arms connecting said first and second retractor blades to a frame structure; and
adjusting means associated with the frame for adjusting the relative distance between the first and second arms and for adjusting the relative height between the first and second retractor blades.

26. (New) The retractor of claim 25, wherein said second arm is rotatably and translationally movable with respect to said frame, and wherein driving of said second arm by said adjusting means to increase the relative distance between the first and second arms also rotates the second arm with respect to said frame, thereby lifting said second retractor blade relative to said first retractor blade.

27. (New) The retractor of claim 26, wherein said second retractor blade is attached to said second arm and rotates with said second arm during said lifting.

28. (New) The retractor of claim 26, further comprising a support arm rotatably coupled to said second arm.

29. (New) A device for use in a surgical procedure for spreading an incision, said device comprising:

a base portion,

a first arm member fixedly attached to said base portion and having a distal end portion extending away from said base portion, said distal end portion having a first rib engaging blade;

a second arm member movably mounted with respect to said base portion, said second arm member having a second rib engaging blade;

a support arm rotatably coupled to said second arm; and

a mechanism operable to drive said second arm member away from said first arm member and to drive said second rib engaging blade vertically with respect to said first rib engaging blade when said first and second rib engaging blades are engaged with ribs on opposite sides of the incision.

30. (New) The device of claim 29, further comprising an offset positioning assembly that allows said support arm to rotate with respect to said second arm in one direction of rotation and prevents rotation of said support arm in an opposite direction of rotation.

31. (New) The device of claim 30, wherein said offset positioning assembly comprises a pawl mounted in one of said support arm and said second arm, and a ratchet mounted in the other of said support arm and said second arm.

32. (New) A device for use in a surgical procedure for spreading an incision, said device comprising:

- a base portion extending substantially horizontally;

- a first blade arm fixedly attached to said base portion and extending outwardly and downwardly therefrom to a first distal end portion having a first rib engaging blade;

- a second blade arm rotatably and translationally mounted with respect to said base portion and extending downwardly therefrom to a second distal end portion having a second rib engaging blade;

- a support arm rotatably coupled to said second arm; and

- a mechanism operable to drive said second arm member away from said first arm member and to drive said second rib engaging blade vertically with respect to said first rib engaging blade when said first and second rib engaging blades are engaged with ribs on opposite sides of the incision.

33. (New) A retractor for opening the chest during surgery, said retractor comprising:

- first and second substantially opposed retractor blades adapted to engage opposite incision edges of a chest incision;

- first and second arms connecting said first and second retractor blades to a frame structure;

- a support arm adjustably mounted to said first arm, said support arm being adjustable for contact with a patient's body prior to spreading the incision edges;

- first adjusting means associated with the frame structure; and

- second adjusting means arranged to allow adjustment of the support arm prior to said spreading;

wherein adjustment by said first adjusting means adjusts the relative distance between the first and second arms as well as the relative height between the first and second retractor blades.

34. (New) The retractor of claim 33, wherein said support arm comprises a pad arm having a sternal pad at a distal end thereof.

35. (New) The retractor of claim 33, wherein said first arm is rotatably and translationally movable with respect to said frame, and wherein adjustment by said first adjustment means comprise driving of said first arm by said adjusting means to increase the relative distance between the first and second arms, thereby also rotating the first arm with respect to said frame, thereby lifting said first retractor blade relative to said second retractor blade.